

**APPENDIX F**  
**HIGHWAY BRIDGE STRUCTURE INVENTORY**  
**AND APPRAISAL (SI&A) SHEET**

SPECIAL CODING INSTRUCTIONS

The Federal Highway Administration (FHWA) publication "Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges" shall be used for completion of the SI&A data form

shown in this appendix except for those items with numbers greater than 199. Numbers greater than 199 denote items unique to the Corps' inventory. These items are described in reference 3*n*.

## HIGHWAY BRIDGE STRUCTURE INVENTORY AND APPRAISAL

### \*\*\*\*\*IDENTIFICATION\*\*\*\*\*

- (1) STATE NAME - \_\_\_\_\_ CODE \_\_\_\_\_  
(200) COE DIVISION \_\_\_\_\_  
(201) COE DISTRICT \_\_\_\_\_  
(202) COE/DA BRIDGE NUMBER \_\_\_\_\_  
(8) STATE STRUCTURE NUMBER # \_\_\_\_\_  
(5) STATE INVENTORY ROUTE (ON/UNDER) \_\_\_\_\_  
      - (a), (b), ..., (e) \_\_\_\_\_  
(2) STATE HIGHWAY DEPARTMENT DISTRICT - CODE \_\_\_\_\_  
(3) COUNTY CODE \_\_\_\_\_ (4) PLACE CODE \_\_\_\_\_  
(6) FEATURES INTERSECTED - \_\_\_\_\_  
(7) FACILITY CARRIED - \_\_\_\_\_  
(9) LOCATION - \_\_\_\_\_  
(11) MILEPOINT \_\_\_\_\_  
(16) LATITUDE \_\_\_\_ . \_\_\_\_ . \_\_\_\_ (17) LONGITUDE \_\_\_\_ . \_\_\_\_ . \_\_\_\_  
(98) BORDER BRIDGE STATE CODE \_\_\_\_\_ % SHARE \_\_\_\_\_ %  
(99) BORDER BRIDGE STRUCTURE NO. # \_\_\_\_\_

### \*\*\*\*\*STRUCTURES TYPE AND MATERIAL\*\*\*\*\*

- (43) STRUCTURE TYPE MAIN: MATERIAL - \_\_\_\_\_  
      TYPE - \_\_\_\_\_ CODE \_\_\_\_\_  
(44) STRUCTURE TYPE APPR: MATERIAL - \_\_\_\_\_  
      TYPE - \_\_\_\_\_ CODE \_\_\_\_\_  
(45) NUMBER OF SPANS IN MAIN UNIT \_\_\_\_\_  
(46) NUMBER OF APPROACH SPANS \_\_\_\_\_  
(107) DECK STRUCTURE TYPE - \_\_\_\_\_ CODE \_\_\_\_\_  
(108) WEARING SURFACE/PROTECTIVE SYSTEM:  
  A) TYPE OF WEARING SURFACE - \_\_\_\_\_ CODE \_\_\_\_\_  
  B) TYPE OF MEMBRANE - \_\_\_\_\_ CODE \_\_\_\_\_  
  C) TYPE OF DECK PROTECTION - \_\_\_\_\_ CODE \_\_\_\_\_

### \*\*\*\*\*AGE AND SERVICE\*\*\*\*\*

- (27) YEAR BUILT \_\_\_\_\_  
(106) YEAR CONSTRUCTED \_\_\_\_\_  
(42) TYPE OF SERVICE ON \_\_\_\_\_  
      UNDER \_\_\_\_\_ CODE \_\_\_\_\_  
(28) LANES: ON STRUCTURE \_\_\_\_\_ UNDER STRUCTURE \_\_\_\_\_  
(29) AVERAGE DAILY TRAFFIC \_\_\_\_\_  
(30) YEAR OF ADT 19\_\_\_\_ (109) TRUCK ADT \_\_\_\_\_  
(19) BYPASS, DETOUR LENGTH \_\_\_\_\_ MI  
\*\*\*\*\*GEOMETRIC DATA\*\*\*\*\*  
(48) LENGTH OF MAXIMUM SPAN \_\_\_\_\_ FT  
(49) STRUCTURE LENGTH \_\_\_\_\_ FT  
(50) CURB/SIDEWALK: LEFT \_\_\_\_ . \_\_\_\_ FT/RIGHT \_\_\_\_ . \_\_\_\_ FT  
(51) BRIDGE ROADWAY WIDTH CURB TO CURB \_\_\_\_ . \_\_\_\_ FT  
(52) DECK WIDTH OUT TO OUT \_\_\_\_ . \_\_\_\_ FT  
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) \_\_\_\_ . \_\_\_\_ FT  
(33) BRIDGE MEDIAN - \_\_\_\_\_ CODE \_\_\_\_\_  
(34) SKEW \_\_\_\_\_ DEG (35) STRUCTURE FLARED \_\_\_\_\_  
(10) INVENTORY ROUTE MIN VERT CLEAR \_\_\_\_\_ FT \_\_\_\_\_ IN  
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR \_\_\_\_ . \_\_\_\_ FT  
(53) MIN VERT CLEAR OVER BRIDGE RDWY \_\_\_\_ FT \_\_\_\_\_ IN  
(54) MIN VERT UNDERCLEAR REF - \_\_\_\_\_ FT \_\_\_\_\_ IN  
(55) MIN LAT UNDERCLEAR RT REF - \_\_\_\_\_ . \_\_\_\_ FT  
(56) MIN LAT UNDERCLEAR LT \_\_\_\_\_ . \_\_\_\_ FT

BRIDGE RECORD WAS UPDATED ON \_\_\_\_\_

\*\*\*\*\*

(App C) SUFFICIENCY RATING - \_\_\_\_\_  
      STATUS \_\_\_\_\_

\*\*\*\*\*

NOTE: ITEM NUMBERS CORRESPOND WITH THOSE USED IN THE  
FHWA NATIONAL BRIDGE INVENTORY EXCEPT FOR THOSE  
GREATER THAN 199, WHICH ARE UNIQUE TO THE USACE. ITEMS  
211 THROUGH 215 ARE ONLY FOR ARMY INSTALLATIONS.

### \*\*\*\*\*NAVIGATION DATA\*\*\*\*\*

- (38) NAVIGATION CONTROL - \_\_\_\_\_ CODE \_\_\_\_\_  
(111) PIER PROTECTION - \_\_\_\_\_ CODE \_\_\_\_\_  
(39) NAVIGATION VERTICAL CLEARANCE \_\_\_\_\_ FT  
(116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR \_\_\_\_\_ FT  
(40) NAVIGATION HORIZONTAL CLEARANCE \_\_\_\_\_ FT

### \*\*\*\*\*CLASSIFICATION\*\*\*\*\*

- (112) NBIS BRIDGE LENGTH - \_\_\_\_\_ CODE \_\_\_\_\_  
(104) HIGHWAY SYSTEM - \_\_\_\_\_ CODE \_\_\_\_\_  
(26) FUNCTIONAL CLASS - \_\_\_\_\_ CODE \_\_\_\_\_  
(100) DEFENSE HIGHWAY - \_\_\_\_\_ CODE \_\_\_\_\_  
(101) PARALLEL STRUCTURE - \_\_\_\_\_ CODE \_\_\_\_\_  
(102) DIRECTION OF TRAFFIC - \_\_\_\_\_ CODE \_\_\_\_\_  
(103) TEMPORARY STRUCTURE - \_\_\_\_\_ CODE \_\_\_\_\_  
(110) DESIGNATED NATIONAL NETWORK - \_\_\_\_\_  
(20) TOLL - \_\_\_\_\_ CODE \_\_\_\_\_  
(21) MAINTENANCE RESPONSIBILITY - \_\_\_\_\_ CODE \_\_\_\_\_  
(22) OWNER - \_\_\_\_\_  
(37) HISTORICAL SIGNIFICANCE \_\_\_\_\_ CODE \_\_\_\_\_

### \*\*\*\*\*CONDITIONS\*\*\*\*\*CODE

- (58) DECK \_\_\_\_\_  
(59) SUPERSTRUCTURE \_\_\_\_\_  
(60) SUBSTRUCTURE \_\_\_\_\_  
(61) CHANNEL & CHANNEL PROTECTION \_\_\_\_\_  
(62) CULVERTS \_\_\_\_\_

### \*\*\*\*\*LOAD RATING & POSTING\*\*\*\*\*CODE

- (31) DESIGN LOAD - \_\_\_\_\_  
(64) OPERATING RATING - \_\_\_\_\_  
(66) INVENTORY RATING - \_\_\_\_\_  
(70) BRIDGE POSTING - \_\_\_\_\_  
(41) STRUCTURE OPEN, POSTED OR CLOSED - \_\_\_\_\_  
      DESCRIPTION - \_\_\_\_\_

### \*\*\*\*\*APPRAISAL\*\*\*\*\*CODE

- (67) STRUCTURAL EVALUATION \_\_\_\_\_  
(68) DECK GEOMETRY \_\_\_\_\_  
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL \_\_\_\_\_  
(71) WATERWAY ADEQUACY \_\_\_\_\_  
(72) APPROACH ROADWAY ALIGNMENT \_\_\_\_\_  
(36) TRAFFIC SAFETY FEATURES \_\_\_\_\_  
(113) SCOUR CRITICAL BRIDGES \_\_\_\_\_

### \*\*\*\*\*PROPOSED IMPROVEMENTS\*\*\*\*\*

- (75) TYPE OF WORK - \_\_\_\_\_ CODE \_\_\_\_\_  
(76) LENGTH OF STRUCTURE IMPROVEMENT \_\_\_\_\_ FT  
(94) BRIDGE IMPROVEMENT COST \$\_\_\_\_, \_\_\_\_ , 000  
(95) ROADWAY IMPROVEMENT COST \$\_\_\_\_, \_\_\_\_ , 000  
(96) TOTAL PROJECT COST \$\_\_\_\_, \_\_\_\_ , 000  
(97) YEAR OF IMPROVEMENT COST ESTIMATE \_\_\_\_\_  
(114) FUTURE ADT \_\_\_\_\_  
(115) YEAR OF FUTURE ADT \_\_\_\_\_

### \*\*\*\*\*INSPECTION\*\*\*\*\*

- (90) INSPECTION DATE \_\_\_\_/\_\_\_\_/\_\_\_\_ (91) FREQUENCY \_\_\_\_\_ MO  
(92) CRITICAL FEATURE INSPECTION: (93) CFI DATE  
  A) FRACTURE CRIT DETAIL - \_\_\_\_-\_\_\_\_ MO A) \_\_\_\_\_  
  B) UNDERWATER INSP - \_\_\_\_-\_\_\_\_ MO B) \_\_\_\_\_  
  C) OTHER SPECIAL INSP - \_\_\_\_-\_\_\_\_ MO C) \_\_\_\_\_  
(203) INSP OFF \_\_\_\_\_  
(204) INSPECTOR \_\_\_\_\_  
(205) INSPECTION COST \_\_\_\_\_  
(211) MACON \_\_\_\_\_  
(212) INSTALLATION NAME \_\_\_\_\_  
(213) MILITARY LOAD CLASS WHEELED \_\_\_\_\_  
(214) MILITARY LOAD CLASS TRACKED \_\_\_\_\_  
(215) INSTALLATION NUMBER (IFS) \_\_\_\_\_  
(216) SEISMIC CATEGORY \_\_\_\_\_  
(217) ACCELERATION COEFFICIENT \_\_\_\_\_  
(218) SOIL SITE CONDITION \_\_\_\_\_